



The Meter

Transportation (Trucking) Update (9-1-2022)

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Introduction

Football season is finally upon us and, at least in Nebraska, it is finally cooling off enough to get out and spend some time outdoors!

We are starting to get into harvest season here in the Midwest and we generally see a strong fall in the auction world. We have been seeing an uptick in quantity of assets consigned and are expecting overall auction values to remain fairly level in the near term. The used class 8 market is predicted to continue to soften with most expecting it to be around 10%-15% down through the end of the year. We have seen some leveling in auction values, but I expect to see a slight dip in values in Q1 of 2023.

The supply chain and lack of new inventory should help hold used values up some, especially in the newer late model equipment. This is an issue that looks like it will have some legs on it and has the potential to get worse with the volatility of the entire supply chain. Availability of tires, brakes, windshields and of course, chips, have been the most talked about shortages coming from our consigners.

A potential recession will have a lot to do with future used values. Most experts are expecting the recession to be mild due to the job market performance and the fact that families are in a better financial position currently than what is typical for these situations.

Normally when we are approaching a slowdown, we are in a situation of overproduction of new pushing volumes up and values down. We still have a backlog of new and a steady demand for equipment which will be a positive for the used market going forward. We are also in a favorable trucking holiday season that should demand decent rates through the end of 2022.

Contract rates that typically follow the spot rate market are starting to decline. Diesel costs have come down some to help margins and truckers are still profitable and looking for loads. Both are still well above historical averages but overall trending down.

Another positive for the used truck and trailer market is the large increase on new costs. A lot of the markup can be blamed on surcharges along the way, but I can't imagine that we would see much of a decrease in new costs going forward, at best fewer increases on new costs for a couple of years. One can only hope. This rise in new cost should also help maintain higher values for older equipment as well. Raising the top should also raise the bottom.

Dealers are again going to be dealing with allotments in 2023. This will mean a vast majority of companies not getting as many trucks as they wish forcing them to continue

to age their fleet or work with other manufactures to get the tractors they require. For the short term this will help tier II equipment to hold their values better than normal. If companies cannot get their full orders filled, it will decrease the number of trades available keeping used inventory lower than demand.

Of course, we still have some factors that can throw a huge wrench in our market. The conflict in Ukraine, the China/Taiwan situation and how exactly the FED is going to proceed in their fight with inflation. These all can have a major impact in the coming years, especially on the supply chain, and very little we can do outside of wait-and-see, hope for the best. An uncomfortable situation to say the least.

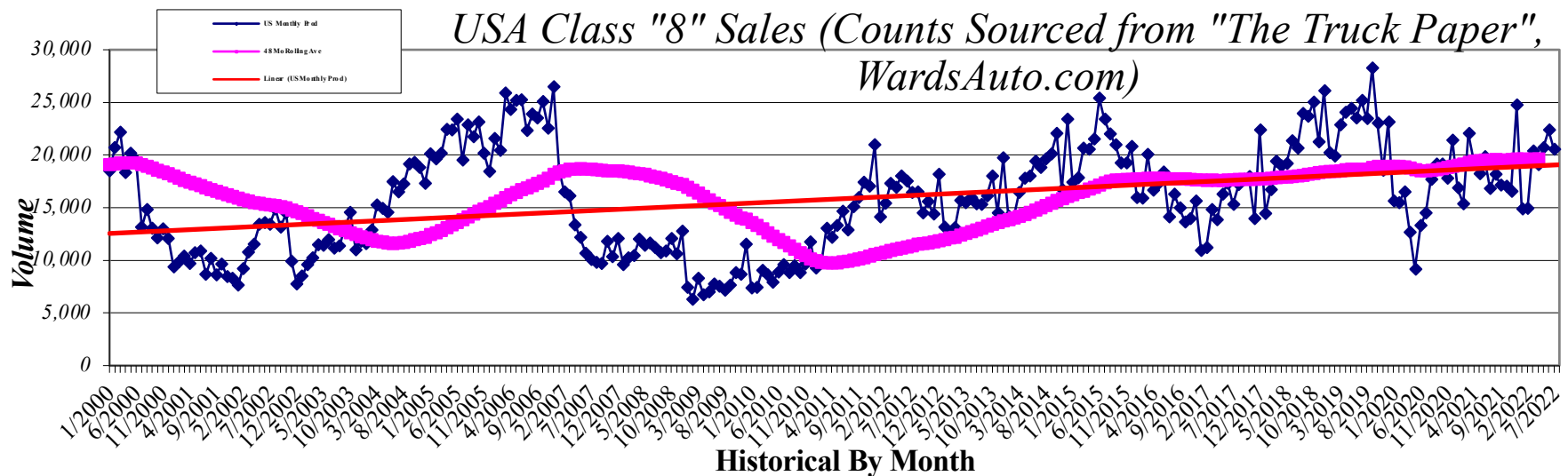
As you will see in the charts provided, auction values have decreased about 25% since the peak in Q1 of 2022. The values that are being brought at auction are still well above traditional values. For all of the reasons previously mentioned we expect this to continue through the end of the year. Buyers, both dealers and end users, have become pickier with what they are willing to bid on. This is holding high quality equipment up and allowing for less desirable equipment taking the brunt of the decline in the overall market.

Trailers have acted very similar to tractors. Late model equipment in good shape is still bringing a premium but of course nothing like 6 months ago. Tier II trailers have fallen back to 10%-20% less than a tier I trailer historically where they have lived.

Lots of talk on EVs. We don't expect to see many of these on the secondary market in the next few years especially at auction. They still have a high cost and an infrastructure cost that will be difficult for the second owner to handle. The new regulations coming in 2024 and then again in 2027 are going to be difficult to navigate for a lot of smaller companies and we are expecting quite a few prebuys in the years preceding the mandates.

So much is going on in this market it is hard to cover it all, and I know you are more interested in the charts and actual sales number, so I will let the numbers do the rest of the talking.

Let's take a look at some of the charts. These should explain a little about what I have talked about with real numbers. As always if you have any thoughts or questions, please feel free to reach out to me anytime avinger@taylorandmartin.com



The chart above shows historical trends that tend to repeat themselves. (Disclaimer: past activity does not necessarily indicate future activity.)

What are the data points and trends telling us now? (Some of my comments are repetitive, and may be found in previous newsletters, but again repeating a notable point makes it more likely to be remembered.)

1: Trucking typically runs in a 7 to 8-year cycle [peak to peak OR trough to trough]. As long as the new sales volume is above the 48MRA, the trend suggests we would see higher builds and values should erode more slowly. Sales have been hovering just below the 48MMR. The demand is there but lack of product has held overall sales back. Expect us to be back above trend when inventory returns.

2: Historical needs have grown from slightly lower than 15,000 Class 8 tractors per month (in the 2000's) to about 17,500-18,000 Class 8 tractors per month now. Since the pandemic low of 9,165 in May of 2020 we have been staying steady at or near 20,000.

3: U.S. Sales ONLY: The 48MRA is the rolling average of all tractors 48 months old or newer. The 48MRA bottomed in 2/2011 (7-year low) with the 48MRA at 9,712. The previous 48MRA high was recorded in 5/2007 at an average of 18,678 (we are now above the high in 2007), which was six months after the actual monthly sales peak in 12/2006, when 26,462 units were sold. We marked a peak for monthly sales in 6/2015 with 25,369 units sold and now again in 9/2019 with 28,258 units sold. This 48MRA Cycle high: (12/2019) 18,923, is a new all-time high. As expected with the pandemic, we have dipped in total sales down to (5/2020) 9,165. Lowest it has been since 10/2010.

4: Actual Class 8 purchases have been down since the year end. December 2019 of 23,119 to averaging 15,271 for the year in 2020 with the low at 9,165 in May. We are currently at 21,321 for 48MMR and as production increases sales will follow until we reach the trucking industry demands.

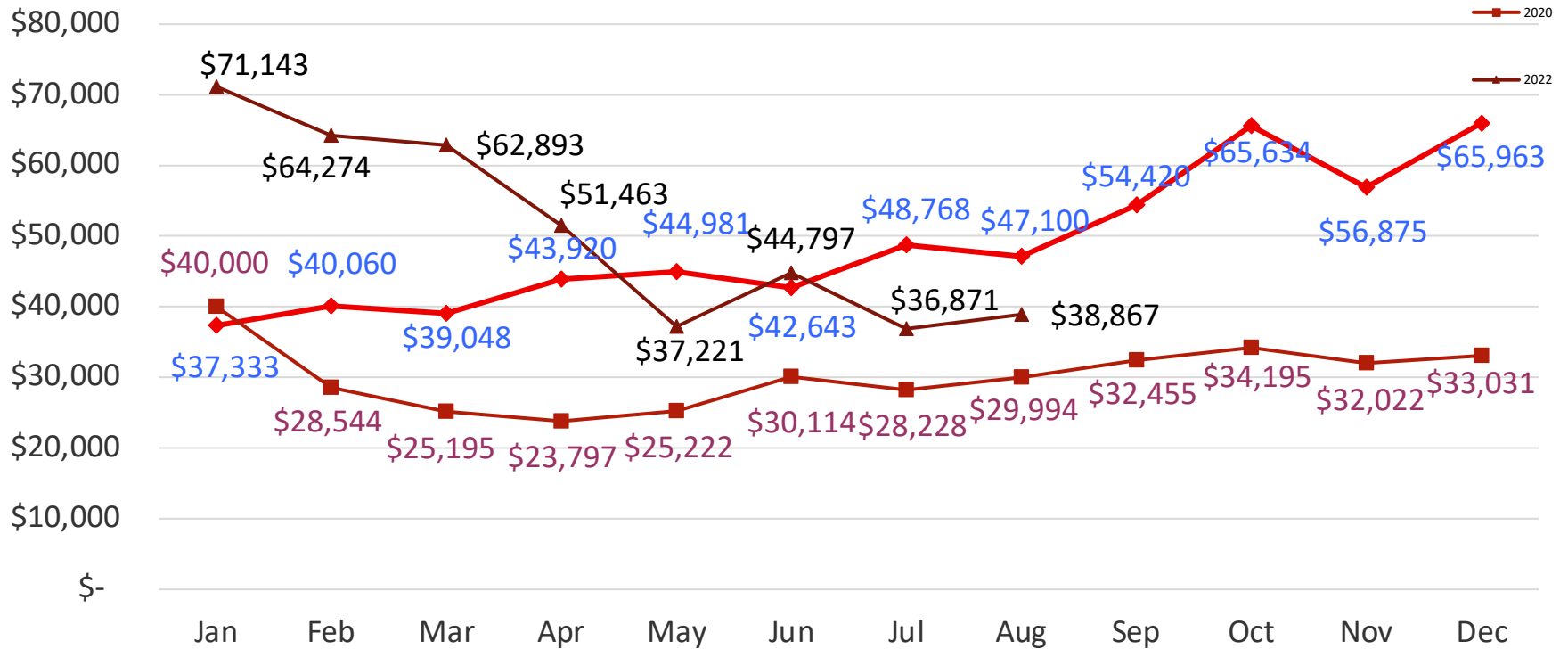
5: Since the drawdown (20%-30%) from July 2015 to July 2017, tractor prices had improved significantly, up until 2019. 2019 was a tough year at the auction level of trade. 2020 showed improvement, and 2021 finished strong. Lack of production has sent buyers to look for used to fill the void until production catches back up with demand.

6: The class 8 truck orders have been leveling off since the peak at the end of 2020 as expected. The demand is still there but slow delivery times and lack of open slots have held the actual orders in check. Confidence in current market and delivery times also hold back orders. We will expect orders to be strong in 2023 leading up to the new regulations coming in 2024.

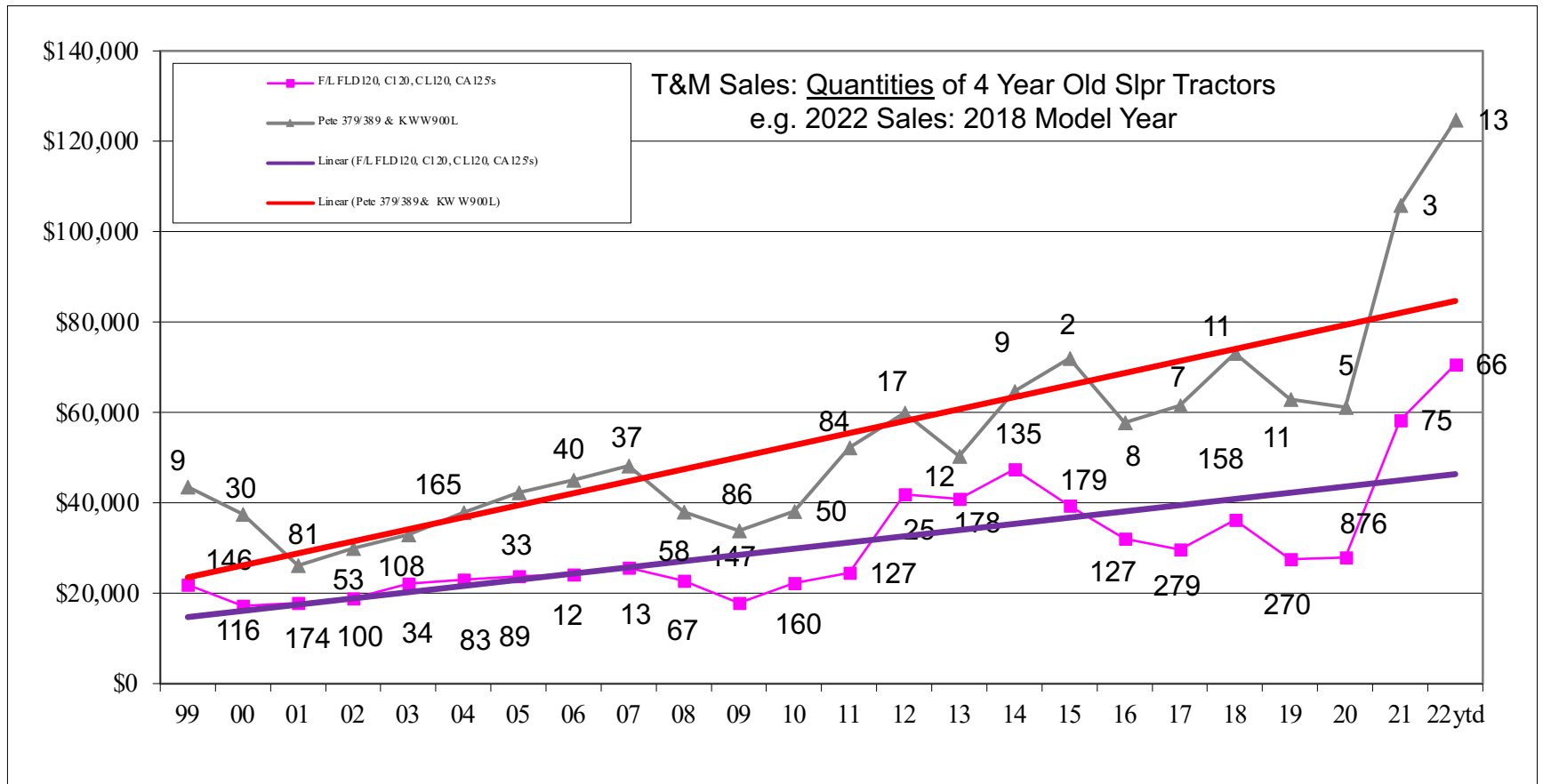
7: We are currently in a trucking friendly market. Supply chain disruptions and the impacts of inflation on consumer demand should hold sales at or around the 48MRA. Both of these factors are trending on being issues throughout the rest of the year. Consumer demand has slowed along with escalating expenses but lack of new has kept demand up to due to aging fleets and elevated repair costs.

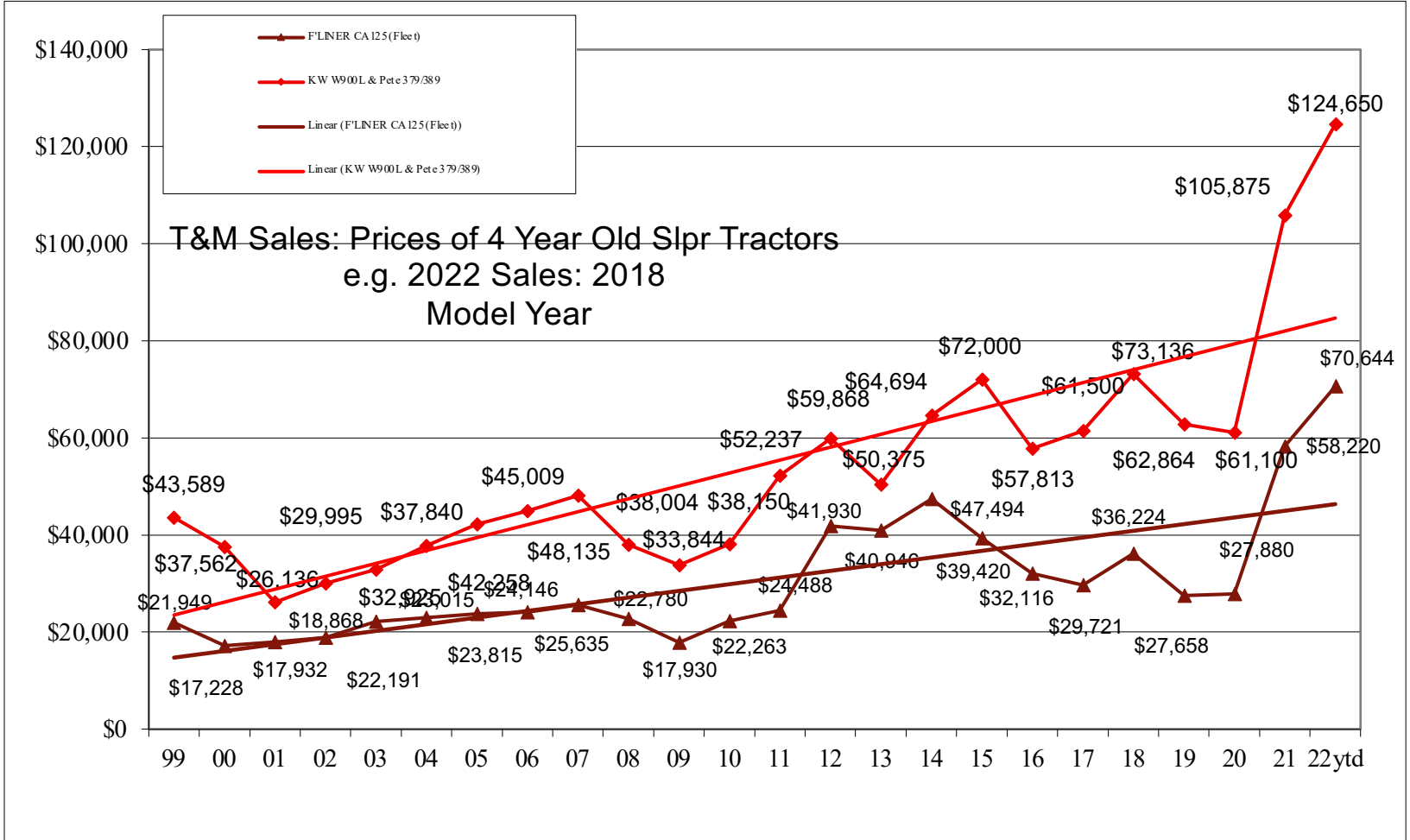
I have decided to keep this chart going. Now we are looking at 2016 Cascadia sleeper trucks into 2022. These trucks are now 2 years older than when they sold in 2020. Now looking at this chart it could be alarming. It is a dramatic drop in April and May, but keep in mind that in 2020 the values for the 2016s would be equivalent to a 2018 currently. 2018s have averaged \$87,808 in April and \$83,538 in May. That is a drastic difference from what a 4-year-old Cascadia was bringing in 2020. All in all, this chart shows the downfall from peak, but also the fact of how high values currently still are. I really don't have a lot to add to this chart as it speaks for itself but take note to the leveling off since the big drop in May. I would expect mid 30s at auction on these through year end.

2016's F/L's Sold at T&M Auction (2020 vs 2021 vs 2022)



True Value Guide Quantities of 2018 model year trucks.
 Here are total actual sales of the Freightliner Cascadia (Fleet) and the O/O Spec'd Petes and KWs.
 Values have remained elevated with quantities being above 2021 levels.
 With new production being held back since the pandemic began volumes have been relatively modest in comparison.



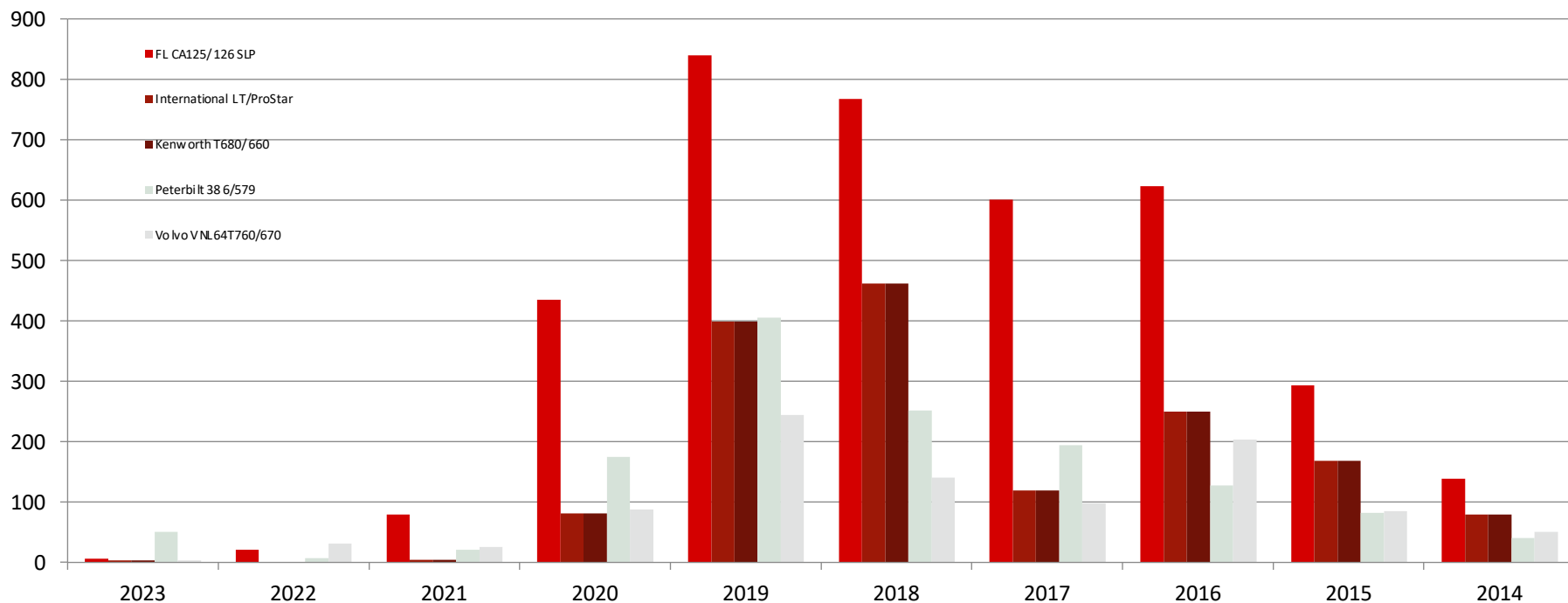


Above are T&M Sales by average annual prices. (As usual, I have combined the Peterbilt 379/389 and Kenworth W900L tractors since both are generally considered to be spec'd as Owner-Operator (O/O) tractors.) As seen in the previous slide overall sale values are well above the trendline.

As mentioned in the previous page with quantities, values are still well above trendlines. We should remain well above trendline for the foreseeable future. As long as new production is hampered by supply chains values will continue to remain well above historical numbers. I will say the 2022ytd numbers have consistently been on the decline since May of this year.

The trends (red and purple lines) over time have been higher, but the price declines are clearly evident (2001-2003 & 2008-2011 & 2015-2017 & 2019 and 2020). Remember, RCN is up (from material costs, EPA requirements, technology and safety/comfort improvements); additionally, inflation is included in the sale prices, thus the upward trend line. Both averages are well above the trend line and should remain there for the foreseeable future.

What is available to the marketplace today? (Aug 15,, 2022) We are up slightly from May (7,227). We have had a shift in available equipment on TruckPaper. You can see below we have a huge decline in new equipment listings and more in the older/trade term equipment. The tightening in the market is already having companies adding older equipment up for sale and dealers having nothing to list. We would expect to see the total number of listings in the 15,000+ range in a normal time, so we still do not have much equipment out there for sale on TruckPaper but currently inventory is slowly beginning to grow.

[illegible]

Additional Factors...

Additional factors to consider for a bias (positive or negative)

- Crude Oil has been falling since June 8th but still above the normal levels from the past six years. Currently WTI has been consolidating between \$85 to \$95. Rising oil supplies and concerns over the economic slowdown is what most analysts say was the reason for this downtrend in crude. In the United States, import prices fell for the first time in seven months in July, which was helped by a strong dollar and lower fuel and nonfuel costs. OPEC just made a surprise decision to cut production targets by about 100,000 barrels per day beginning in October. Analysts forecast \$80 to \$95 a barrel in the year 2023.
- Building Activity (Home, Office, etc): Home building in the U.S. dropped 2% month over month in June, the lowest since September of 2021. Home prices have continued to grow despite higher mortgage rates, the national median listing price for a single-family home was up 16.9% from the same time last year and more than 31% from June 2020. Mortgage applications dropped to the lowest level at the end of June, marking the biggest slump in 22 years. Existing home sales dropped 5.4% from May to June, marking the 5th consecutive month of declining sales. The nations average rate for a 30-year mortgage loan is 5.99%.
- Divers: Shortage! Analysts estimate about 231,100 job openings for heavy and tractor-trailer drivers are projected each year, on average over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force. Walmart announced that it will pay first year private fleet truck drivers as much as \$110,000 a year. The median annual pay for truck drivers in May 2021 was only \$48,310. Interest by new entrants in driver training has soared in 2022, and private CDL schools and community colleges report surging enrollment for driver training programs, with many saying they're at capacity for the first time since COVID-19 pandemic began.
- Ports: Still playing catch up. The ports have shrunken the backlog of boats at the port towards the middle of June. With China easing lockdowns the exports have increased out of China which will keep ports back to having an overwhelming backlog. Another bottle neck to watch out for is the labor contract between the International Longshore and Warehouse Union and its employer group which on July 1st expired. The last time this contract expired back in 2014 it took more than nine months to reach a new contract agreement. The lengthy dispute included work slowdowns and lockouts that created massive traffic jam on the docks. As of right now both sides pledged to keep working until a new agreement is reached.
- Construction: Supply chain disruptions and price volatility are expected to be among the biggest challenges in 2022. Infrastructure sectors like highways, streets, transportation, water supply/sewage and others are poised to lead the growth in the construction industry in the second half of 2022 and into 2023.
- Politics: Inflation Reduction Act which just recently passed. It involves lowering cost on health care, tax credits on clean energy, adjusting taxes on corporations and individuals with the help of the IRS.
- Inflation: CPI was 8.5% in July and 9.1% in June. It may seem that we have peaked on inflation, but the next hurdle is how fast will CPI come down. That will determine how many and by how much the rate hikes will be for the rest of the year. PPI (Producer Price Index) has also come down which was -.5% in July and 1.1% in June. This is also a major factor that will hopefully lower prices in goods and services



Trailers

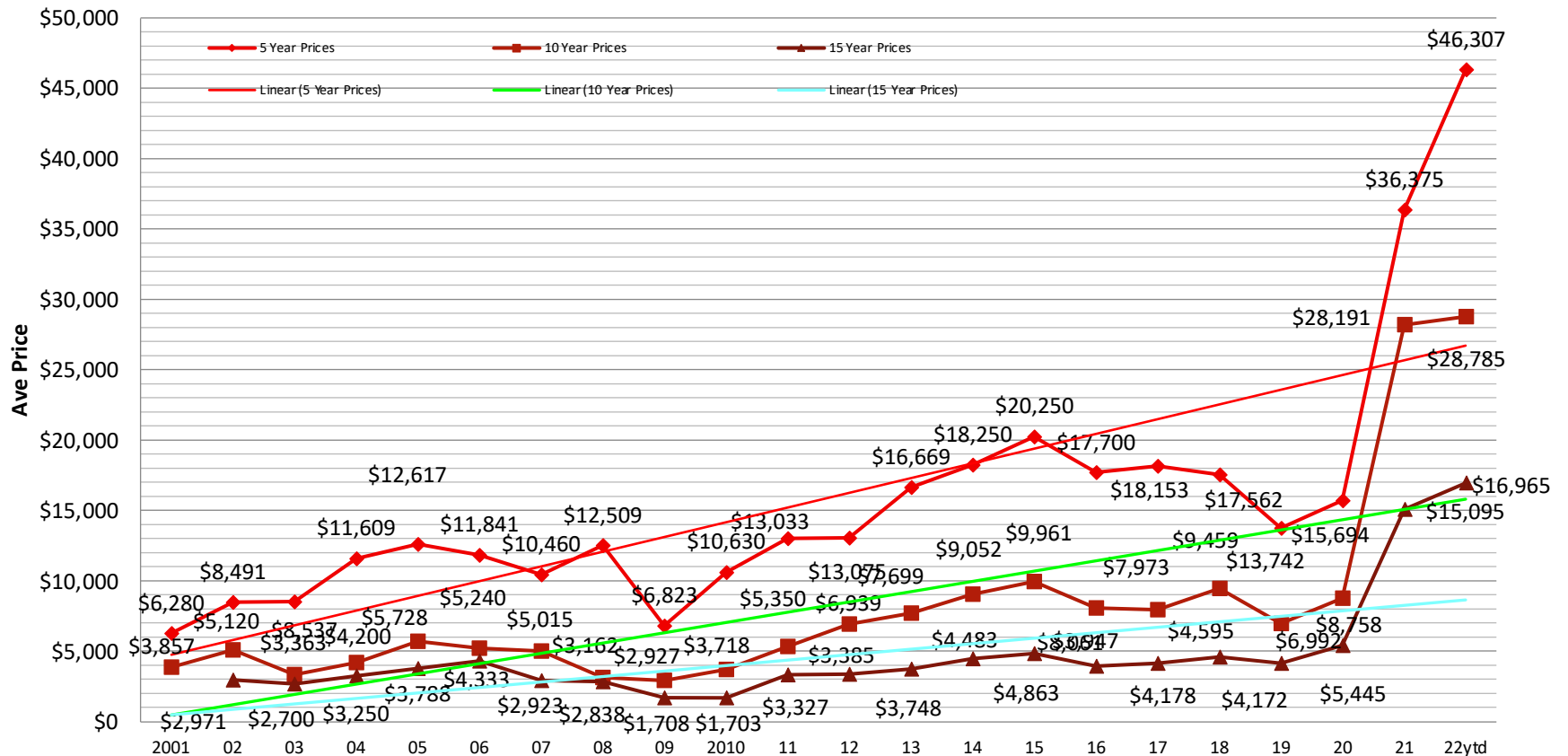
- Production issues continue to hold up new and used equipment values. Vans and reefers are still bringing higher values prior to covid at auction. The first quarter of auctions were very strong, but from the end of April till now the values have slightly dropped. The values should still be above pre pandemic levels throughout the rest of 2022.
- **Ag Trailers:** Demand is slowly starting to pick back up based on the season. Grain trailer prices have been steady at auction throughout the year. Fertilizer and Corn have come down from the end of April highs and back to where it was at the start of the year. Oil is still above where it started at the beginning of the year. With the state of Iowa being one of the top producers and exporters of corn is having a bad year. There crops are underperforming so far this year. Which could add to more global inflation down the road.
- **Pneumatic Trailers:** Steady demand for large capacity trailers. 1000-1050s still struggling. Still increasing quantities of the small cubes on the secondary market are holding values down. New costs are still rising with a 4-8 month wait. Back logs are increasing while net builds are staying steadily the same.
- **Flatbeds and Drop Decks:** Overall market has been staying steady with continuing increasing new costs. Should still expect to maintain normal to less than normal depreciation going forward. Spot rates have decreased 10% from May and June highs. Load-to-Truck Ratio also has fallen 75% from the March highs, which usually forecasts a continuing lower spot rate, and vice versa. Load-to-Truck Ratio is higher when there are more loads and less trucks to fill those loads and vice versa. Backlogs have been slowly decreasing while net builds have done the same. Since the beginning of the year, quantity of units for sale on the public market has been roughly the same, besides in August where there was a 10-15% up tick in for sale units.
- **Heavy Haul Trailers:** Demand is steady. Back logs are staying steady, while net builds are slowly decreasing.
- **Chassis Trailers:** Import container volume to U.S. ports is trending to be about 1.5% lower than 2021. This shift follows the first half of the year averaging 5.5% over 2021 volumes. With the ports still being backed up, demand and prices will stay relatively strong. New competitors have started to manufacture chassis trailers just like they did in dry vans, while new cost continues to keep going higher.
- **Dry Vans and Reefers:** Very high demand is continuing to keep prices elevated from prior pandemic levels. On the public market of for sale units there has been a 20% increase of quantities since the start of June compared to the month over month at the beginning of the year. Back logs on Reefers have been staying the same while Dry Vans have been slowly decreasing. Spot raises have fell 18-19% from the highs of January. While Load-to-Truck Ratio has fallen 65-68% from the highs of January. Starting to see an ease in the inflated prices of vans and reefers from what they were bringing in the first quarter of the year, but still above pre pandemic levels.
- Sales and orders are remaining high with 6-12 month wait for new spurring the increase in values in many sectors. While auctions are starting to see a down tick in prices from the first quarter. Some manufacturers have already stopped taking orders for the rest of the year.
- Overall, the trailer market is still very strong compared to pre pandemic levels while the demand of goods nationwide continuing to drive the trucking industry. Supply issues will help maintain the higher-than-normal values.

T&M Auction Results: Tracking 5, 10 & 15 Year Old A/R Dry Vans

5, 10 & 15 Year old Dry Vans sales (Taylor & Martin Auctions) are charted below:

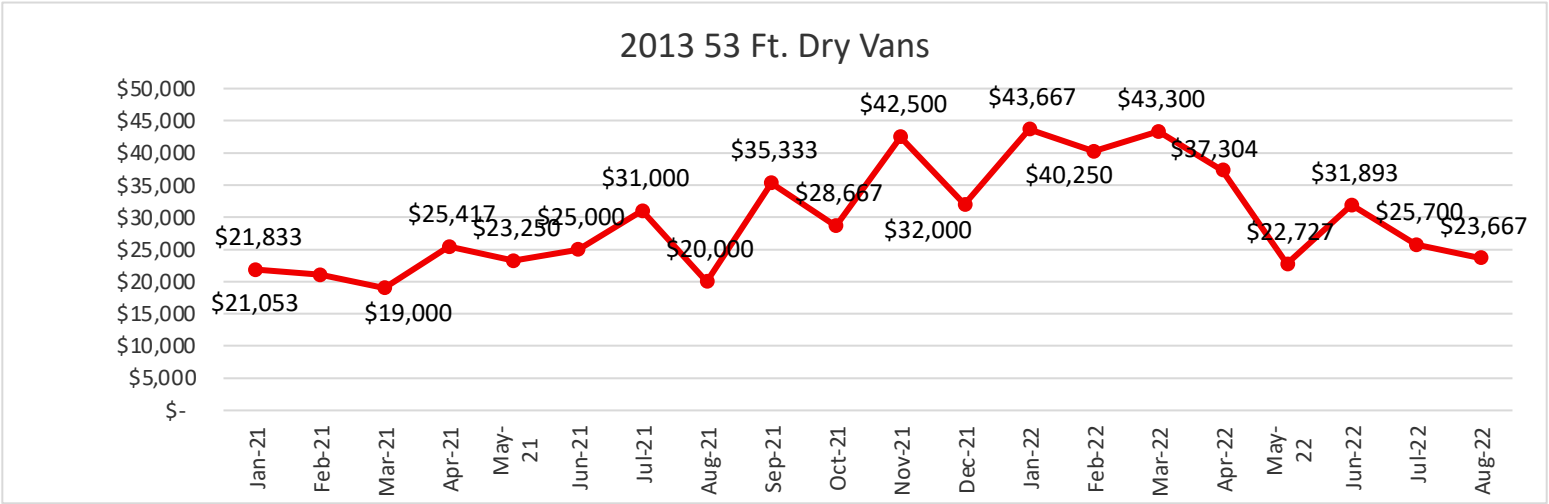
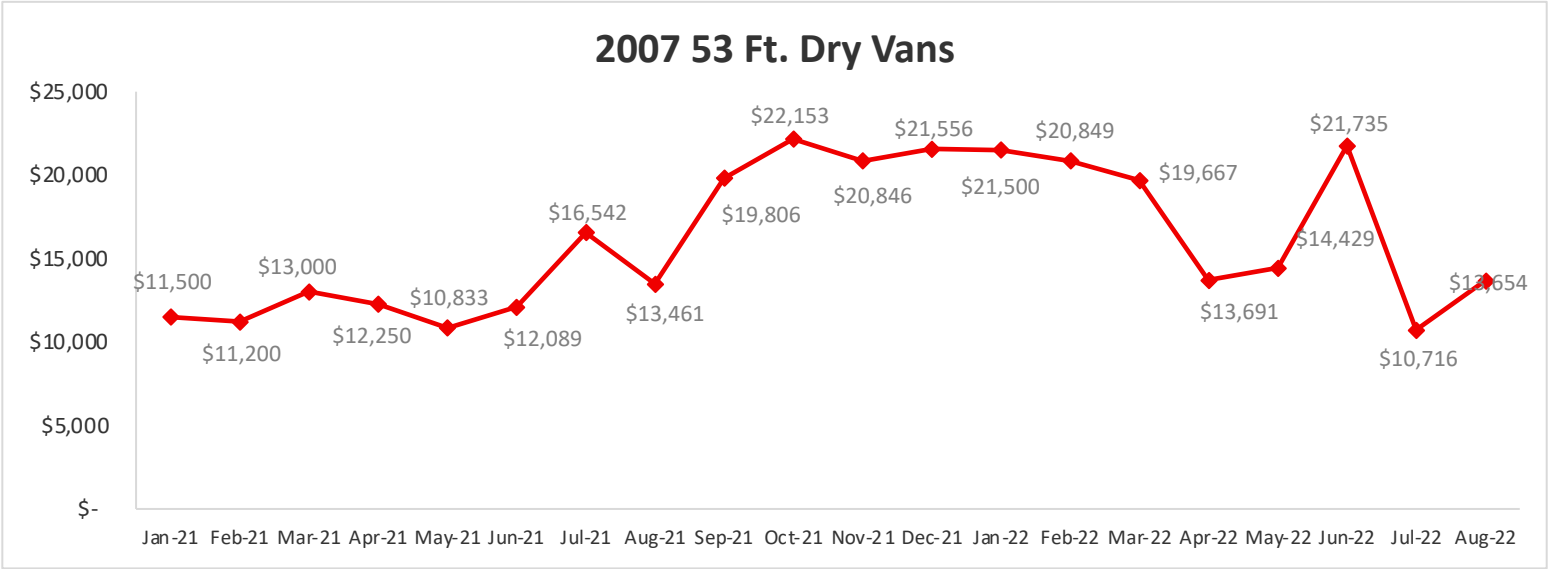
This chart is still amazing to look at, but numbers have fallen some. March 1st we were at \$56,833 on 5-Year-old Vans and \$36,769 on 10-Year-old Vans. Still showing a lot of strength but it does seem we are off the peak values in the vans as well. Volume is still high at auction, but I would expect to see some slowing in the late model vans being added to auctions as they are not bringing 30-50% over new cost anymore.

T&M Auction Results: Tracking 5 Yr, 10 Yr & 15 Yr Old A/R Dry Vans



The below charts show the drift we have had from off the peak in Q1. Numbers are still above where we were at in January of 2021. We also included what we have seen for estimated new costs of a new tier 1 plate dry van. These are estimates from past invoices and are just a guide to show the change in new cost recently and how the rise in new cost should help hold used costs above past trends. We have had a few groups of trailers come through the auction in different conditions but a high enough volume to change the look of the 2007 van chart.

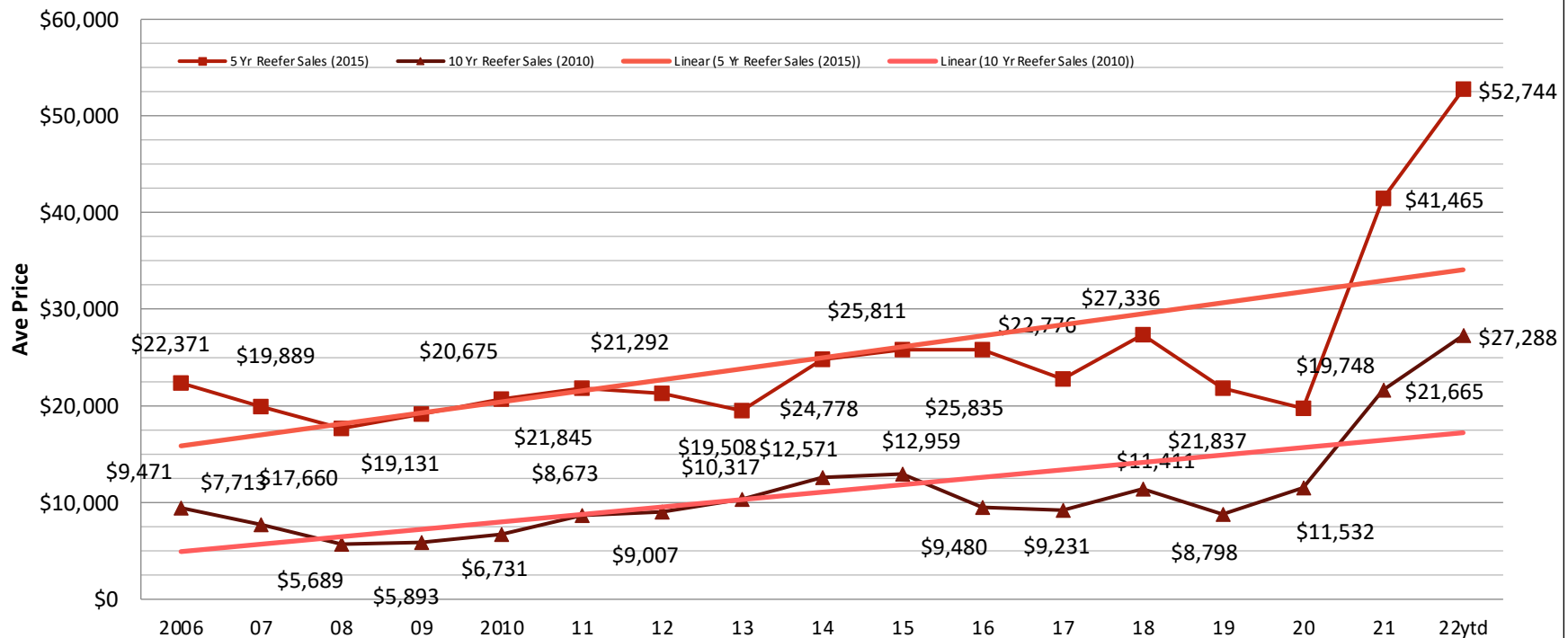
	Estimated New Cost 53 Ft. Plate Vans
2013	\$ 29,000
2014	\$ 29,500
2015	\$ 30,500
2016	\$ 30,000
2017	\$ 29,900
2018	\$ 30,000
2019	\$ 32,500
2020	\$ 33,850
2021	\$ 36,000
2022	\$ 42,000
2023	\$ 50,000



5 & 10 Year Old Refrigerated Trailer sales (Taylor & Martin Auctions) are charted below:

Reefers: Both 5 & 10 year old (2012). Refrigerated trailers have been along the same lines as the vans.
Spot rates like the vans have taken a large hit since the beginning of the year. I would expect these stay well above trendlines as well.
2022ytd numbers have softened overall but still strong.

All 53 Ft. Reefers



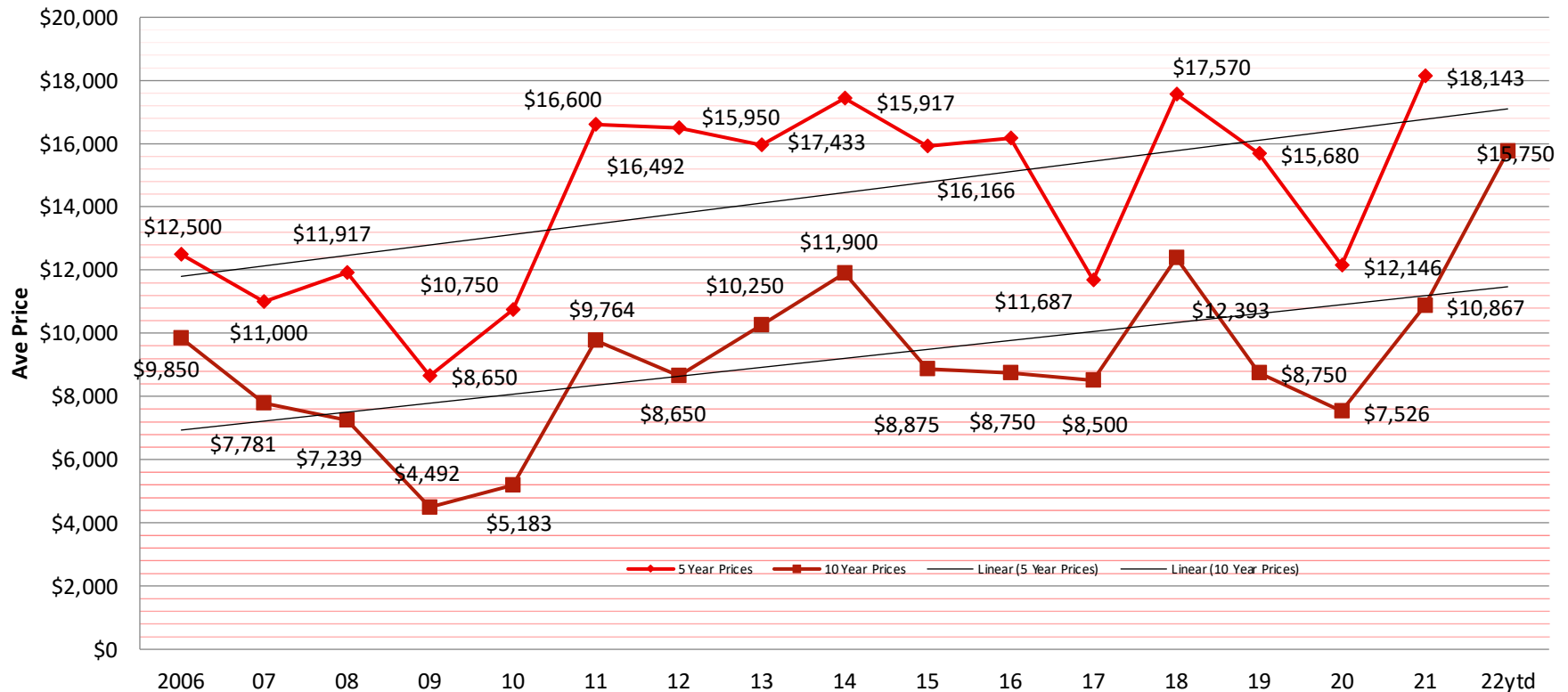
5 & 10 Year Old Composite Flatbed Sales (Taylor & Martin Auctions) are charted below:

Combo Flatbeds (Alum/Steel Composite) enjoyed a small rise in values and demand over the late spring but have begun to soften. Overall prices are up since 2020 but we have not had enough move through the auction to definitively says strong used market at auction.

The flatbed market has recovered from the 2015-2017 pullback. Actual sales numbers (2019) were very low. Considering previously mentioned cautions, and the current number of flatbeds offered in the retail market, this segment is showing significant stress as well. Load rates have improved and started a small growth in the flatbed market, but it still has a long way to go.

The flatbed values have remained steady over the past few months. The below graph is hampered by lack of sales in these particular model years. Looking at sales of different age values would be below trendline and holding steady. Limited sales data so far this year and not showing any signs of increasing in Q4. Volumes have been down all summer and limited number of 5 & 10 year old trailers have sold at auction.

Composite (Alum/Steel) 48 Ft. Flatbeds





John Seymour's thoughts on
Agricultural equipment,
"filling the Ag Hopper"
in The Meter!

- Corn is finally past knee high with sunny weather. Despite a slow start, fuel, fertilizer, and chemical woes the farm crops are maturing. Unlike the past 40 years, rapid inflation has caused much of the annual agricultural inputs to rise in cost no different than other industries in our world today. The war in the Ukraine with Russia has played a part in fueling this metric but we also have helped as Americans won't go without. The pandemic spending for goods is slowly redirected to services and other needs as the US races to have what we want.
- The pandemic stifled production volumes and created backlogs in our supply chain. It also allowed many Americans to go online and order to their hearts content. This big demand helped spur the trucking market, which has continued into this year, though now showing signs of slowdown. What's next? Thanks to high fuel prices and inflation and little to no return to normal truck production there will be a day of reckoning but it will probably be delayed into early next year or later. The Federal Reserve shows demand for commercial and industrial loans are up with lessened credit restrictions vs. the last two plus years but admits any fallout from looser policies will lag. Despite early signs of the economy slowing, the Fed bumped interest rates again. Credit access, coupled with tighter labor market and rising costs of supplies, small business will feel the pinch to produce this year. Add ESG (Environmental, Social, Governance) to the mix and this year is shaping into one of more change brought on under economic pressures.
- Agriculture is no exception, continued supply chain issues and labor needs outside the family unit have and will slow production and pinch profits. Ag labor migrates from fewer on-farm workers to Agribusiness sectors, technicians, mechanics, agronomists, meat processors, factory help. The migration continues as labor moves into other non-ag industries such as construction and manufacturing. Despite every phase of Ag lacking labor Social Governance looms ... taking responsibility, a strong core of our ag sector. Yet private money feeds acquisitions, R&D and so much more which now focuses on responsible, sustainable investing as this sector grows, business looks for longer term, sustainable investments that appease new stockholders.
- Enter transitional agriculture. In a time when inputs like fertilizer/chemicals are in short supply, agriculture looks to making change by sustainable solutions in a wake of limitations and global supply problems. Biofuels are chemically changing to blend without petroleum products, solar energy finds rural settings to test larger and more complex structures to *supply energy back to the grid*, larger more expensive planters switch to variability in-row planting, carbon credits are now marketable, and the list goes on. A dominate factor in the tractor dashboard today is the farm field data desired more by most of the supporting businesses, yet the least understood by any of the generations attempting to use it timely within each seasonal farming cycle.
- More changes are on the horizon as trading partners like China *slow its food imports*, work with more non-US global powers like Russia to negotiate solutions to their own future population changes. US agricultural has gone headlong into the Pandemic challenges of 2022 and currently is experiencing some positive commodity headwinds but in agriculture we know the winds of today tend to bring the storms of tomorrow. Strong beef and grain markets have rarely existed at the same time and aren't expected to sustain long. Is there time to cultivate avid interest in our youth and to train up-coming labor pools for the technologies needed to stay ahead of the curve? Time will tell, but agriculture is strong and pro-active and will find a way to continue its sustainable efforts for generations to come both within our sector and for many others.
- As economies of scale increase the acres the average farmer tills, equipment manufacturers realize larger machines will ultimately give way to smaller, less soil compacting units though undoubtedly working together by more technology than we can imagine today. Our youth may not toil throwing bales but manage more acres of equipment/technology necessary to address future field issues. Equipment markets may see add-on implement products to aid varied farm sizes across this country under a watchful eye of "agricultural raised" absentee landowners keeping their own ties to the dirt of their youth. As summer looms on, the farmer defines needs from wants necessary to help the ground produce now and long into the sustainable future.

John L. Seymour, ASA Senior Appraiser